



ATTACHMENT A

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-44. (Canceled)

45. (New) A computer card for controlling electro-pneumatic calibrators of a system including a tire pressure sensor, a compressor pressure sensor for sensing the pressure of a system compressor, a temperature sensor, a water inlet control, a vacuum cleaner control, an electric heater control, an alarm, a modem providing input information and output information, solenoid valves for controlling inflation of a tire with air, inflation of a tire with nitrogen, and deflation of a tire, solenoid valves for the system compressor, and a purge valve, said computer card being adapted to be connected to a power source and a relay, and including, in a front part thereof, a liquid crystal display and a data input keyboard for entering data into the computer card, said computer card further comprising a microchip controller for storing system management programs and for receiving information from said data input keyboard and from said tire pressure sensor, said compressor pressure sensor, said temperature sensor, said modem, and a mechanical enabling key, and for controlling operation of said solenoid valves for controlling inflation of a tire with air, inflation of a tire with nitrogen, and deflation of a tire, said solenoid valves for the system compressor, said water inlet control, said vacuum cleaner control, said heater control, the output information of said modem, said alarm, and said liquid crystal display.

46. (New) A computer card as claimed in claim 45, wherein the liquid crystal display comprises a front display, and wherein the system further comprises a rear liquid crystal display.

47. (New) A computer card as claimed in claim 46, wherein the microchip controller transmits information to the front display and to the rear display, before, during and after the calibration operation, to provide displaying of previously defined messages.

48. (New) A computer card as claimed in claim 46, wherein the microchip controller receives temperature data from the temperature sensor and provides for display of said temperature data on said front display and said rear display.

49. (New) A computer card as claimed in claim 46, wherein the microchip controller commands the activation of a heater, as needed, for protection of the front display and rear display against the damaging effects of low temperatures.

50. (New) A computer card as claimed in claim 46, wherein the microchip controller receives data from a clock and provides information with respect to preventive maintenance and replacement of spare parts on the front display and the rear display.

51. (New) A computer card as claimed in claim 46, wherein the microchip controller is connected to a sensor for detecting a parameter relating to the operation of the compressor and, if necessary, immediately interrupts compressor operation, and provides a corresponding message on the front system display and the rear display.

52. (New) A computer card as claimed in claim 51 wherein said parameter is compressor oil level.

53. (New) A computer card as claimed in claim 46, wherein the microchip controller, upon entering an emergency mode, instantly opens a solenoid valve for controlling deflation of a tire, interrupts at least one action by the system, provides for display of a corresponding message on the front display and the rear display, and activates the alarm.

54. (New) A computer card as claimed in claim 45, wherein the microchip controller checks on current tire pressure and interrupts system operations when a pressure reading is sensed which is incompatible with previously executed operations.

55. (New) A computer card as claimed in claim 45, wherein the microchip controller checks and accepts a new zero reference for pressure inside preset limits set every time the system is used, and interrupts system operation when pressure values are outside of said preset limits.

56. (New) A computer card as claimed in claim 45, wherein a said purge valve is provided on a compressor tank of the system compressor and on at least one of a filter, dryer, condenser separator and an air network, and wherein the microchip controller controls the purge valve on the compressor tank and the purge valve on at least one of said filter, dryer, condensed separator and air network.

57. (New) A computer card as claimed in claim 45, wherein the microchip controller manages and turns on and off the system compressor according to one of (i) preset values and (ii) a calculation with respect to operational pressure limits.

58. (New) A computer card as claimed in claim 45, further comprising a safety valve.

59. (New) A computer card as claimed in claim 45, wherein a second liquid crystal display along with a second screen and key set are disposed on a back portion of a housing so as to form a double-faced unit.

60. (New) A computer card as claimed in claim 45, further comprising a serial communication port for receiving and transmitting data at least to one of a remotely operated modem, a printer and an infra-red sensor.

61. (New) A computer card as claimed in claim 45, wherein an overpressure value is entered in the system for calibration of large tires.

62. (New) A computer card as claimed in claim 45, further comprising a special emergency key adapted to be activated by hardware.

63. (New) A computer card as claimed in claim 45, further comprising a relay for disconnecting an energy supply to the system and activating the solenoid valve for controlling deflation of the tire every time an emergency key is pressed.

64. (New) A computer card as claimed in claim 45, further comprising a voltage to frequency converter for converting system voltage signals into a corresponding frequency.

65. (New) A computer card as claimed in claim 45, wherein the microchip controller activates and monitors tire inflation and deflation responsive to the insertion of coins into the system.

66. (New) A computer card as claimed in claim 45, wherein the microchip controller identifies the insertion of coins and activates a water pump and an opening valve and a closing valve of the water inlet control.

67. (New) A computer card as claimed in claim 45, wherein the microchip controller activates solenoid valves of the vacuum cleaner control to open and close a vacuum supply for a vacuum cleaner, in response to the insertion of coins into the system.

68. (New) A computer card as claimed in claim 45, wherein the microchip controller identifies the insertion of coins, and activates and monitors a detergent supply system responsive thereto.

69. (New) A computer card as claimed in claim 45, wherein the microchip controller activates and monitors a nitrogen supply system.

70. (New) A computer card as claimed in claim 45, wherein the microchip controller incorporates counters and totalizers for coins, for providing per operation, counting per kind of function counting used and general counting.

71. (New) A computer card as claimed in claim 45, wherein counting totals for coins received by the system are provided responsive to use of a unique password for checking exactness and authenticity.

72. (New) A computer card as claimed in claim 45, wherein the microchip controller system provides detection, at any time, of whether a tire is or not connected correctly to the system.

73. (New) A computer card as claimed in claim 45, wherein the microchip controller, during inflating or deflating of a tire, detects possible pressure losses in a pressure line connected to the tire.

74. (New) A computer card as claimed in claim 45, wherein the microchip controller checks whether the system is connected to tires without harm to an auto-reset function.

75. (New) A computer card as claimed in claim 45, wherein the microchip controller processes an internal routine controlling only initiating a process for inflation or deflation of a tire, after the controller verifies that a line to be pressurized is completely stabilized, and presents an error message when pressure in a line connected to the tire does not stabilize after a predetermined period of time.

76. (New) A computer card as claimed in claim 45, wherein the microchip controller calculates stabilization speed for current line pressure and compares the calculated stabilization speed with a standard minimum speed, and, depending on the results of the comparison, certifies that the line pressure is stable.

77. (New) A computer card as claimed in claim 45, wherein the liquid crystal display displays an estimated time for finishing inflating or deflating of a tire, and said estimated time is updated on every pulse received by the liquid crystal display.

871 Cont
78. (New) A computer card as claimed in claim 45, wherein the microchip controller stores, internally, standard minimum and maximum pressure limits which are preset for each type of installation with which the system is to be used.

79. (New) A computer card as claimed in claim 45, wherein the microchip controller is adapted to receive changes with respect to minimum and maximum pressure limits, by means of said input keyboard, after inputting of a password by an authorized person.

80. (New) A computer card as claimed in claim 45, wherein the microchip controller automatically calculates a minimum reliable pressure pulse in order to subsequently calculate a total inflating/deflating time for a tire.

81. (New) A computer card as claimed in claim 45, wherein the microchip controller enters a standby mode a predetermined period without use, or if no key of the input keyboard is pressed.

82. (New) A computer card as claimed in claim 45, wherein the microchip controller interrupts operation of the system, provides for exhibiting of a corresponding message, opens said deflation valve and activates the alarm, every time an error, failure or discrepancy occurs for three consecutive times during performance of a system operation or function.

83. (New) A computer card as claimed in claim 45, wherein the microchip controller interrupts operation of the system, exhibits a corresponding message, opens said deflation valve and activates the alarm, every time any key is pressed during system operation.

84. (New) A computer card as claimed in claim 45, further comprising a three-way solenoid valve for, when turned off, diverting air to the atmosphere so as to allow the compressor to operate continuously and without heating.

85. (New) A computer card as claimed in claim 45, wherein the microchip controller provides for exhibiting of the complete totals of all items used and totals of all failures that occur.

86. (New) A computer card as claimed in claim 45, wherein the microchip controller commands procedures including turning on the compressor, release of line pressure and checking of a compressor minimal internal pressure, and wherein when the system does not reach said minimal internal pressure, causes an "out of service" message to appear on the liquid crystal display.

87. (New) A computer card as claimed in claim 45, wherein the liquid crystal display continuously exhibits the current time and a remaining usage time, and wherein the microchip provides for turning on of the system once said usage time has elapsed.

88. (New) A computer card as claimed in claim 45, wherein the system includes an air-retention tip as a replacement for functions of those associated with filling of an empty tire.

89. (New) A computer card as claimed in claim 45 wherein the system, once operation thereof is terminated, goes back into operation only after entry of a newly issued password.

90. (New) A computer card as claimed in claim 45 wherein, during inflation of a tire, the system makes a check to ensure there is enough pressure in the air line.
